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EXAMINER

RIVERO, MINERVA

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2655

DATE MAILED: 08/22/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/014,406	Applicant(s) KOENIG ET AL.	
	Examiner Minerva Rivero	Art Unit 2655	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 17 May 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 38-74 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 38-74 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. In the Remarks filed 5/17/05, Applicants cancelled claims 1-37, added claims 38-74, and submitted arguments for allowability of pending claims. Furthermore the examiner thanks the Applicants for noting the typographical error regarding the reference to Gerson *et al.*

Response to Arguments

2. Applicant's arguments with respect to newly added claims 38-74 have been considered but are moot in view of the new ground(s) of rejection. [Examiner notes that newly added claim 38 is not correspondent to claim 1, and claims more specific subject matter. The new grounds of rejection for claim 1 and its dependent claims were necessitated by the new subject matter.]

3. Applicant's arguments, see Remarks (Page 16, Lines 16-24) filed 5/17/05, with respect to the rejection(s) of claim(s) 52, 53, 58 and 65 (15, 16, 21 and 28) under White *et al.* and Bijl *et al.* have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of Houston (US Patent 6,459,910).

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 38, 40, 44-47 and 50 are rejected under 35 U.S.C. 103(a) as being unpatentable over White *et al.* (US Patent 6,408,272), in view of Houston (US Patent 6,459,910), and further in view of Bijl *et al.* (US Patent 6,366,882).

6. Regarding claim 38, White *et al.* disclose a locally distributed speech recognition system for converting spoken language into digitized readable text, for a mobile communication device comprising:

a preliminary recognition component located in said mobile communication device (*local device performs preliminary signal processing*, Col. 2, Lines 4-8)

an interpreting component located remote from said mobile communication device (*remote system for sophisticated speech recognition*, Col. 2, Lines 8-10).

However White *et al.* do not explicitly disclose but Houston does disclose said local preliminary recognition component is a preliminary phoneme recognition component (*phoneme recognition unit*, Col. 3, Lines 57-64; *bidirectional process*, Col. 4, Lines 57-65; Fig. 1, element 7) and said remote interpreting component is a remote

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phoneme-interpreting component (Col. 2, Line 66 – Col. 3, Line 2; Col. 3, Lines 38-42; *receiving station and recreation unit*, Col. 4, Lines 17-42; Fig. 1, element 19).

Therefore it would have been obvious to one ordinarily skilled in the art to supplement the teachings of White *et al.* by having said local preliminary recognition component be a preliminary phoneme recognition component and said remote interpreting component be a remote phoneme interpreting component, as disclosed by Houston, since phonemes are capable of being identified by a relatively small amount of digital data and therefore reduce the transmission power necessary to accurately reproduce the speech at the receiving end, as further taught by Houston (Col. 2, Lines 31-35 and 49-56).

Moreover, the combined teachings of White *et al.* and Houston do not explicitly disclose but Bijl *et al.* do disclose a component for the re-transmission of the digitized text back to the user is provided (*text is returned to the client*, Col. 6, Lines 40-43).

Therefore it would have been obvious to one ordinarily skilled in the art at the time of the invention to supplement the combined teachings of White *et al.* and Houston with Bijl *et al.* and have a component for the re-transmission of the digitized text back to the user in order to enable the user to edit the converted text if deemed necessary, and to have a reference file in the mobile device that can be used by the integrated speech recognizer for recognition improvement purposes as taught by Bijl *et al.* (Col. 6, Lines 43-45).

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7. Regarding claim 40, a digital processing component connected to the preliminary recognition component is inherent, being that such an element is necessary for *White et al.*'s preliminary recognition and remote interpretation of the input speech.

8. Regarding claim 44, *White et al.* does not disclose but Houston does disclose the preliminary recognition component and the interpreting component comprise a storage component to store coded phonemes for further processing (Col. 1, Lines 34-44; Col. 2, Lines 26-30).

Therefore it would have been obvious to one ordinarily skilled in the art at the time of the invention to modify the teachings of *White et al.* by having the preliminary recognition component and the interpreting component comprise a storage component to store coded phonemes for further processing, as taught by Houston, since storing the coded phonemes is necessary for the further processing and transmission of the same.

9. Regarding claim 45, *White et al.* further disclose the interpreting component is directly connected to or included in a network (*suitable network*, Col. 2, Lines 1-10).

10. Regarding claim 46, *White et al.* further disclose the interpreting component is delocalized in the network (*sophisticated speech recognition implemented at the remote system*, Col. 2, Lines 4-10; Col. 2, Lines 38-44).

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11. Regarding claim 47, *White et al.* disclose the interpreting component comprises a word recognition component (Col. 2, Lines 43-44).

12. Regarding claim 49, *White et al.* further disclose the interpreting component comprises a syntax recognition component (*natural language technique*, Col. 6, Lines 36-40).

13. Regarding claim 50, *White et al.* further disclose the transmission facility is designed to transfer the data in accordance with a transfer protocol (*transmission methods in accordance with the Advanced Mobile Phone Service standard*, Col. 2, Lines 22-26).

14. Claim 39 is rejected under 35 U.S.C. 103(a) as being unpatentable over *White et al.* (US Patent 6,408,272), in view of Houston (US Patent 6,459,910), further in view of *Bijl et al.* (US Patent 6,366,882), as applied to claim 38 above, and further in view of Nelson (6,061,718).

15. Regarding claim 39, the combined teachings of *White et al.*, Houston and *Bijl et al.* do not explicitly disclose but Nelson does disclose said digitized readable text is transmitted in a short message (SMS) (Col. 3, Lines 40-43).

Therefore it would have been obvious to one ordinarily skilled in the art at the invention to modify the teachings of White *et al.*, Houston and Bijl *et al.* by having said digitized text transmitted in a short message (SMS), as taught by Nelson, so as to employ a message transfer protocol that will serve effectively between mobile devices in a messaging network.

16. Claims 41-42 are rejected under 35 U.S.C. 103(a) as being unpatentable over White *et al.* (US Patent 6,408,272) in view of Houston (US Patent 6,459,910) and Bijl *et al.* (US Patent 6,366,882), as applied to claim 38 above, and further in view of Yoshida *et al.* (US Patent 5,150,449).

17. Regarding claim 41, the combined teachings of White *et al.*, Houston and Bijl *et al.* do not disclose but Yoshida *et al.* suggest the preliminary recognition component comprises a neural network and/or a time delay neuronal network (*neural network unit*, Col. 5, Lines 55-62).

Therefore it would have been obvious to one ordinarily skilled in the art at the time of the invention to modify the combined teachings of White *et al.*, Houston and Bijl *et al.* by having the preliminary recognition component comprise a neural network and/or a time delay neuronal network as taught by Yoshida *et al.* in order to enable the efficient recognition of patterns in the input speech.

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18. Regarding claim 42, the combined teachings of White *et al.*, Houston and Bijl *et al.* do not disclose but Yoshida *et al.* suggest said neural network is adaptive and interactive (*speaker adaptation*, Col. 4, Lines 3-9) and/or comprises a modular structure (*multi-layer structure*, Col. 4, Lines 18-21; *layers*, Fig. 1).

Therefore it would have been obvious to one ordinarily skilled in the art at the time of the invention to supplement the combined teachings of White *et al.*, Houston and Bijl *et al.* by having the neural network be adaptive and interactive and/or comprise a modular structure as disclosed by Yoshida *et al.* in order for the system to be adaptable to the particular pronunciation of a user and to attain greater accuracy in the speech recognition process.

19. Claim 43 is rejected under 35 U.S.C. 103(a) as being unpatentable over White *et al.* (US Patent 6,408,272) in view of Houston (US Patent 6,459,910) and Bijl *et al.* (US Patent 6,366,882), as applied to claim 38 above, further in view of Cubbage *et al.* (US Patent 6,606,486).

Regarding claim 43, the combined teachings of White *et al.*, Houston and Bijl *et al.* do not disclose but Cubbage *et al.* suggest the preliminary recognition component and the interpreting component comprise a component for converting different codes into each other (*bits representing ASCII text are assembled into an SMS (Short Message Service) message*, Col. 6, Lines 4-8).

Therefore it would have been obvious to one ordinarily skilled in the art at the time of the invention to supplement the teachings of *White et al.*, Houston and Bijl *et al.* by having the preliminary recognition component and the interpreting component comprise a component for converting different codes into each other, as suggested by Cubbage *et al.* in order to allow the efficient transmission of the text messages using the SMS protocol.

20. Claims 48 and 51 are rejected under 35 U.S.C. 103(a) as being unpatentable over *White et al.* (US Patent 6,408,272) in view of Houston (US Patent 6,459,910) and Bijl *et al.* (US Patent 6,366,882), as applied to claim 38 above, further in view of Komori *et al.* (US Patent 6,662,159).

21. Regarding claim 48, the combined teachings of *White et al.*, Houston and Bijl *et al.* do not explicitly disclose but Komori *et al.* do disclose the interpreting component comprises a grammar recognition component (Col. 4, Lines 3-5).

Therefore it would have been obvious to one ordinarily skilled in the art at the time of the invention to supplement the teachings of *White et al.*, Houston and Bijl *et al.* by having the interpreting component comprise a grammar recognition component, as taught by Komori *et al.* in order to improve the speech recognition accuracy by including word context.

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22. Regarding claim 51, the combined teachings of White *et al.*, Houston and Bijl *et al.* do not explicitly disclose but Komori *et al.* do disclose the interpreting component uses a discrete hidden Markov model for interpreting the received coded phonemes (*HMM (Hidden Markov Model)*, Col. 4, Lines 15-17).

Therefore it would have been obvious to one ordinarily skilled in the art at the time of the invention to supplement the teachings of White *et al.*, Houston and Bijl *et al.* by having the interpreting component use a discrete hidden Markov model for interpreting the received coded phonemes as taught by Komori *et al.* in order for the system to have a convenient and readily available model for the execution of speech recognition.

23. Claim 52 is rejected under 35 U.S.C. 103(a) as being unpatentable over Houston (US Patent 6,459,910) in view of Bijl *et al.* (US Patent 6,366,882).

Regarding claim 52, Houston discloses an interpreting component for use in a locally distributed speech recognition system comprising an input for receiving digitally coded phonemes from a remote preliminary recognition component (Col. 4, Lines 17-27; Fig. 1, elements 3 and 7).

However, Houston does not disclose but Bijl *et al.* do disclose an output for digital coded readable text (Col. 6, Lines 40-45) and a component for reinterpreting a first draft of a digitized readable text (*correction units*, Col. 4, Lines 52-59).

Therefore it would have been obvious to one ordinarily skilled in the art at the time of the invention to supplement the teachings of Houston with an output for digital coded readable text and a component for reinterpreting a first draft of a digitized readable text, as taught by Bijl *et al.*, in order to enable the post-processing of the preliminary text and to provide the user with a more accurate transcription.

24. Claims 53, 54, 57, 58, 60, 61, 62, 64, 65, 67, 68, 70, 71, 72 and 74 are rejected under 35 U.S.C. 103(a) as being unpatentable over Houston (US Patent 6,459,910) in view of Bijl *et al.* (US Patent 6,366,882), as applied to claim 52 above, and further in view of Padmanabhan *et al.* (US Patent 6,219,638).

25. Regarding claims 53, 58 and 65, Houston discloses

a mobile communication device for the use in a locally distributed speech recognition system (*pager or mobile telephone*, Col. 2, Line 66 – Col. 3, Line 2; Fig. 1, element 3);

an acoustic coupler for converting an acoustic voice waveform into an electronic waveform (inherent in *mobile telephone*, Col. 2, Line 66 – Col. 3, Line 2; Fig. 1, element 5);

a preliminary recognizing component for extracting phonemes contained in said waveform (Col. 3, Lines 58-64; Fig. 1, element 7);

a converting component for generating a message/code containing the phonemes (Col. 3, Line 64 – Col. 4, Line 2) and

a transmitting component for transmitting said message/code (Col. 4, Lines 17-20; Fig. 1, element 13).

However, Houston does not explicitly disclose but Bijl *et al.* suggest a component for receiving text transferred from a remote interpreting component (Col. 11, Lines 51-55).

Therefore it would have been obvious to one ordinarily skilled in the art at the time of the invention to supplement the teachings of Houston with a component for receiving text transferred from a remote interpreting component, as suggested by Bijl *et al.*, in order to enable the user to see the interpreted text data from speech recognition at a remote system that hosts the interpretation component.

Furthermore, the combined teachings of Houston and Bijl *et al.* do not explicitly disclose but Padmanabhan *et al.* suggest

a component for accepting/rejecting a text received from said remote interpreting component (Col. 4, 52-54) and

a component for dispatching an according message (*sending the accepted transcription*, Col. 4, Lines 62-65).

Therefore it would have been obvious to one ordinarily skilled in the art at the time of the invention to supplement the combined teachings of Houston and Bijl *et al.* with a component for accepting/rejecting a text received from said remote interpreting component and a component for dispatching an according message as suggested by

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Padmanabhan *et al.*, in order to ensure that the user is satisfied with the transcription and can ultimately send the user-approved transcription, as taught by Padmanabhan *et al.* (Col. 4, Lines 62-63).

26. Regarding claim 54, the combined teachings of Houston and Bijl *et al.* do not explicitly disclose, but Padmanabhan *et al.* suggest a component for retransmitting an amended readable text together with the rejection message (*send text as selected by user after user's acceptance or rejection has been transcribed*, Col. 4, Lines 50-65).

Therefore it would have been obvious to one ordinarily skilled in the art at the time of the invention to supplement the teachings of Houston and Bijl *et al.* with a component for retransmitting an amended readable text together with the rejection message, as suggested by Padmanabhan *et al.*, in order to provide the user with the opportunity to accept, reject and amend the transcription until found agreeable.

27. Regarding claims 57 and 60, Houston teaches supporting the recognizing a phoneme by digitally processing the waveform of the speech input (Col. 3, Lines 58-64; *Fig. 1, element 5 and 'spoken message'*).

28. Regarding claim 61, Houston and Bijl *et al.* do not disclose, but Padmanabhan *et al.* further disclose

storing said digitized readable text (Col. 3, Lines 22-24);

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dispatching a rejection signal (*indicating rejection of the message*, Col. 4, Lines 56-58);

receiving a rejection signal (Col. 3, Lines 34-35; *rejection is transcribed*, Col. 4, Lines 58-61);

re-interpreting the code to generate a different digitized readable text (*correcting the transcription*, Col. 4, Lines 50-52; *text is sent after the user is satisfied with the transcription*, Col. 4, Lines 62-65).

Therefore it would have been obvious to one ordinarily skilled in the art at the time of the invention to supplement the teachings of Houston and Bijl *et al.* with Padmanabhan *et al.* by storing the digitized readable text, dispatching a rejection signal, receiving a rejection signal and re-interpreting the code to generate a different digitized readable text, as further taught by Padmanabhan *et al.*, in order to have the digitized readable text readily available for further processing, effectively communicating to the control system the user's preference regarding disposal of the transcription and provide the user with a correct or more accurate transcription.

29. Regarding claim 62, Houston and Bijl *et al.* do not disclose, but Padmanabhan *et al.* further disclose

after accepting the digitized readable text post-processing of the accepted digitized readable text by the user (*user can correct any part of the message*, Col. 4, Lines 50-51) and

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storing the post-processed digitized readable text (*sending text to the message server*, Col. 4, Lines 62-65).

Therefore it would have been obvious to one ordinarily skilled in the art at the time of the invention to supplement the teachings of Houston and Bijl *et al.* with Padmanabhan *et al.* by post-processing of the accepted digitized readable text by the user and storing the post-processed digitized readable text, as further taught by Padmanabhan *et al.*, in order to allow the user to edit the transcription according to user's preference and to have an updated transcription readily available.

30. Regarding claim 64, Houston and Bijl *et al.* do not disclose, but Padmanabhan *et al.* further disclose dispatching said digitized readable text or said post-processed digitized readable text by the user to a recipient (*recipient of the message*, Col. 1, Lines 49-51).

Therefore it would have been obvious to one ordinarily skilled in the art at the time of the invention to supplement the teachings of White *et al.*, Gerson *et al.*, Bijl *et al.*, and Padmanabhan *et al.* by having said digitized readable text or said post-processed digitized readable text by the user to a recipient, as further taught by Padmanabhan *et al.*, in order to appropriately convey the user's intention regarding the transcribed message.

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31. Regarding claims 68 and 72, Houston does not explicitly disclose, but Bijl *et al.* do disclose interpretation of the code is executed in accordance with a specific language selected by a user (*user can indicate language used*, Col. 7, Lines 51-55).

Therefore it would have been obvious to one ordinarily skilled in the art at the time of the invention to supplement the combined teachings of Houston by having the interpretation code executed in accordance with a specific language, as further taught by Bijl *et al.*, in order to provide an interpretation service that will be useful to a broader range of customers.

32. Regarding claims 70 and 74, Houston further discloses compressing the phoneme code prior to transmittal to the interpreting component (Col. 1, Lines 34-44).

33. Claims 55, 69 and 73 are rejected under 35 U.S.C. 103(a) as being unpatentable over Houston (US Patent 6,459,910) in view of Bijl *et al.* (US Patent 6,366,882) and further in view of Padmanabhan *et al.* (US Patent 6,219,638), as applied to claims 16, 21 and 28 above, respectively, further in view of Sherwood *et al.* (US Patent 6,424,943).

Regarding claims 55, 69, and 73, the combined teachings of Houston, Bijl *et al.*, Padmanabhan *et al.* do not explicitly disclose but Sherwood *et al.* do disclose having the preliminary recognition component distinguish vowels, consonants, intervals and probabilities (*acoustic scores correspond to probabilities*, Col. 11, Lines 49-55;

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probability density functions (pdf) for vowels and consonants, Col. 21, Lines 49-53);
length of the sound and duration, Col. 10, Lines 46-54).

Therefore it would have been obvious to one ordinarily skilled in the art at the time of the invention to supplement the teachings of Houston, Bijl *et al.* and Padmanabhan *et al.* by having the preliminary recognition component distinguish vowels, consonants, intervals and probabilities, as taught by Sherwood *et al.*, so as to compose the aforementioned variables in a score that would aid and improve the accuracy of the speech recognition process, as taught by Sherwood *et al.* (Col. 5, Lines 26-36).

34. Claims 56 and 59 are rejected under 35 U.S.C. 103(a) as being unpatentable over Houston (US Patent 6,459,910) in view of Bijl *et al.* (US Patent 6,366,882), further in view of Padmanabhan *et al.* (US Patent 6,219,638), as applied to claims 53 and 58 above, respectively, and further in view of Nelson (US 6,061,718).

Regarding claims 56 and 59, the combined teachings of Houston, Bijl *et al.* and Padmanabhan *et al.* do not explicitly disclose but Nelson discloses the code used is the code of a short message system used in telecommunication networks (Col. 3, Lines 39-44).

Therefore it would have been obvious to one ordinarily skilled in the art at the invention to modify the teachings of Houston, Bijl *et al.* and Padmanabhan *et al.* by

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having the code used be the code of a short message system used in telecommunication networks, as taught by Nelson, so as to employ a message transfer protocol that will serve effectively between the locally distributed speech recognition system and the remote interpreting component.

35. Claims 67 and 71 rejected under 35 U.S.C. 103(a) as being unpatentable over Houston (US Patent 6,459,910) in view of Bijl *et al.* (US Patent 6,366,882), as applied to claim 52 above, further in view of White *et al.* (US Patent 6,408,272) and further in view of Padmanabhan *et al.* (US Patent 6,219,638).

36. Regarding claims 67 and 71, the combined teachings of Houston and Bijl *et al.* do not disclose but White *et al.* do disclose during interpretation the code is processed in accordance with orthography and grammar (*grammar component*, Col. 16, Lines 2-4; *grammar definition language containing specific words* (thus considering orthography), Col. 16, Lines 9-13).

Therefore it would have been obvious to one ordinarily skilled in the art at the time of the invention to supplement the combined teachings of Houston and Bijl *et al.* with having the code processed in accordance with orthography and grammar during interpretation, as taught by White *et al.*, in order to minimize transcription errors.

Furthermore Houston does not disclose but Bijl *et al.* do disclose, during

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interpretation the code is processed in accordance with syntax assessment (*allowed sequence of words*, Col. 16, Lines 19-21).

Therefore it would have been obvious to one ordinarily skilled in the art at the time of the invention to supplement the teachings of Houston by having the code processed in accordance with syntax assessment during interpretation, as further taught by Bijl *et al.*, in order to enhance accuracy of the final interpretation by assigning a higher confidence to those interpretation versions with an approved word sequence or by rejecting those interpretation versions that do not follow a pre-approved word sequence, said pre-approved word sequences being correct grammar representations of the particular language in use.

Conclusion


37. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Minerva Rivero whose telephone number is (571) 272-7626. The examiner can normally be reached on Monday-Friday 9:00 am - 6:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Talivaldis Ivars Smits can be reached on (571) 272-7628. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

MR 8/19/05



W. R. YOUNG
PRIMARY EXAMINER